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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/160,581 09/25/98 ISHIKAWA

R 0041-0619-3

022850 QM22/0405
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EXAMINER

CHANG, R

ART UNIT	PAPER NUMBER
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3729

L3
DATE MAILED:

04/05/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No.	Applicant(s)
	09/160,581	ISHIKAWA ET AL.
	Examiner Rick K. Chang	Art Unit 3729

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 29 January 2001.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 5-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 5-10 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) <input type="checkbox"/> Notice of References Cited (PTO-892)	18) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____
16) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	19) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
17) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____	20) <input type="checkbox"/> Other: _____

DETAILED ACTION

Specification

1. The following title is suggested: A Method for Cutting Optical Fiber.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims 5-10 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for cutting fiber, does not reasonably provide ~~enablement~~ for $\beta \leq -253a+65$. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims. If a is 0.5 mm, then β equals -61.5 mm/minute. It is impossible to operate at speed less than 0 mm/minute. Applicants fail to disclose the range of "a" which the invention will operate.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 5-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5, line 3: the " $\beta \leq -253a+65$ " limitation renders the claims vague and indefinite. The limitation fails to recite limits for the variable "a". Therefore, the blade

moving speed reaches beyond conventional levels, such as speeds less than 0 mm/minute.

Claim 6 recites the limitation "the step of heating" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Fellows et al (US 4,790,465).

Fellows discloses a cutting blade (3) having a blade thickness (see Fig. 1) at a speed (Figs. 3-5) close to 0 mm/minute. Fellows satisfies the expression " $\beta \leq 253a + 65$." Further, Fellows discloses a cutting blade holder (4), an optical fiber supporter (1), a speed reducing device (5), and a drive force transmission device (561).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fellows et al (US 4,790,465) in view of Logan et al (US 4,262,417).

Fellows fails to disclose heating the cutting blade.

Logan discloses heating the cutting blade (Fig. 7) thereby providing a smooth cut surface.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Fellows by heating the cutting blade as taught by Logan thereby providing a smooth cut surface.

7. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fellows et al (US 4,790,465) in view of Marks (US 3,783,726).

Fellows fails to disclose a motor and a plurality of speed reducing gears.

Marks discloses a motor (3) and a plurality of speed reducing gears (9) thereby reducing the speed from the source to the target.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Fellows by providing a motor and a plurality of speed reducing gears as taught by Marks thereby reducing the speed from the source to the target.

8. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fellows et al (US 4,790,465)/Marks (US 3,783,726) as relied upon claims above, and further in view of Burns (US 5,850,773).

Fellows/Marks fail to disclose a cam and a cam follower.

Burns discloses a cam and a cam follower (col. 1, lines 35-38 and Figs. 6-8) thereby providing relatively easy to establish a properly timed relationship between the action of the knife and the action of the cam follower (col. 1, lines 55-57).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Fellows/Marks by providing a cam and a cam follower as taught by Burns thereby providing relatively easy to establish a properly timed relationship between the action of the knife and the action of the cam follower.

Response to Arguments

9. Applicant's arguments filed January 29, 2001 have been fully considered but they are not persuasive.

The speed takes into account only the distance traveled; it does not take into account the direction of travel. Speed is always a positive number. If it is a negative number, the blade will travel back in time.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a method for cutting an optical fiber according to the present invention is directed to cutting an optical fiber by crossing a blade across the optical fiber) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Col. 3, line 13 discloses the blade cleaves the fibres cross-section and Figs. 3 and 5 show the speed at which the fibre is cleaved. Since Fellows discloses a cutting blade (3) having a blade thickness (see Fig.

1) at a speed (Figs. 3-5) close to 0 mm/minute. Fellows satisfies the expression " $\beta \leq -253a+65$."

In response to applicant's argument that Logan and Marks disclose . . . $\beta \leq -253a+65$, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 3729

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rick K. Chang whose telephone number is 703-308-4784. The examiner can normally be reached on M-F, 5:30 a.m.-1:30 p.m. (EST).

RC
March 24, 2001

RC
Allan M. Shoap
Supervisory Patent Examiner
Group 3700